ABSTRACT

A centering mechanism for a constant velocity torque transfer device that transfers rotary power from a first shaft to a second shaft via an intermediate shaft or connecting yoke. The centering mechanism maintains the first and second shafts at equal angles relative to the intermediate shaft while permitting relative movement between the first and second shafts. More particularly, the intermediate shaft houses a cam tube which in turn houses linkage members that interconnect with the first and second shafts. Movement by one of the shafts is transferred to the other shaft via the linkage. In this regard, the centering mechanism maintains a strict geometrical relationship between the shafts that is required to produce a constant velocity joint. In one embodiment, the cam tube of the centering device is rotationally coupled to the inside surface of the intermediate shaft to support the device as well as dampen vibrations.